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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,489	06/07/2005	Tetsuo Umemura	122825	9165
25944 7590 02/12/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER KERSHTEYN, IGOR	
			ART UNIT	PAPER NUMBER
			3745	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,489	UMEMURA ET AL.	
	Examiner	Art Unit	
	Igor Kershteyn	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>05/18/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watts (5,265,422) in view of Moon (3,585,797).

Watts teaches an HST drive circuit formed by connecting a hydraulic pump 10 stored in a pump case 20 and a hydraulic motor 12 stored in a motor case 32 in a closed circuit form, wherein formed is a cooling line for, while discharging a relief oil

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from a charge circuit 36, 44,72,62,64 for replenishing the closed circuit with a pressure oil, making the discharged oil flow into a reservoir 38, from the pump case 20 through the motor case 32 to an oil cooler 60.

Watts doesn't teach discharging a relief oil from a charge circuit into the pump case.

Moon, in figure 1, teaches discharging a relief oil from a charge circuit into the pump case.

Since Watts and Moon are analogous art because they are from the same field of endeavor, that is the hydrostatic transmission art, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to dump the oil discharged from the replenishment circuit into a pump case of Watts as taught by Moon for the purpose of creating a pressure differential between the pump case pressure and motor case pressure for forcing the replenishment discharge oil flow into the motor case.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (4,617,797) in view of Moon (3,585,797).

Williams teaches an HST drive circuit formed by connecting a hydraulic pump 10 stored in a pump case 26 and a hydraulic motor 11 stored in a motor case 44 in a closed circuit form, wherein formed is a cooling line 68 for, while discharging a relief oil from a charge circuit 50,58 for replenishing the closed circuit with a pressure oil, making

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the discharged oil flow into a reservoir, from the pump case 26 through the motor case 44 to an oil cooler 70.

Williams doesn't teach discharging a relief oil from a charge circuit into the pump case.

Moon, in figure 1, teaches discharging a relief oil from a charge circuit into the pump case.

Since Williams and Moon are analogous art because they are from the same field of endeavor, that is the hydrostatic transmission art, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to dump the oil discharged from the replenishment circuit into a pump case of Williams as taught by Moon for the purpose of creating a pressure differential between the pump case pressure and motor case pressure for forcing the replenishment discharge oil flow into the motor case.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of seven documents.

Weisenbach (2,961,829) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

Hann et al. (3,230,699) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

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Reinke (3,236,049) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

Mayr et al. (4,802,336) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

Gebhard et al. (5,746,509) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

Landhuis (6,964,163) is cited to show a HST having a motor case flow discharged into a tank through a cooler.

Sauer-Danfoss 520L0517 Technical Manual is cited to show an internal configuration of a hydrostatic pump discharging a relief oil from a charge circuit for replenishing the closed circuit with a pressure oil into the pump case.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

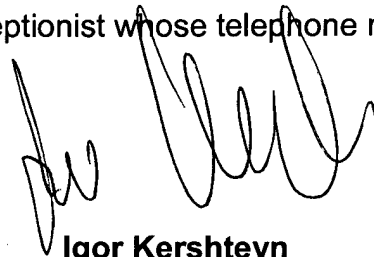
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK

January 31, 2007

A handwritten signature in black ink, appearing to read 'Igor Kershteyn', is written over the printed name and title.

IGOR KERSHTEYN
PRIMARY EXAMINER

Igor Kershteyn
Primary Patent examiner.
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